



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,575	07/31/2003	Alan James Maple	70093-0144	1574
20915	7590	10/06/2004	EXAMINER	
MCGARRY BAIR PC 171 MONROE AVENUE, N.W. SUITE 600 GRAND RAPIDS, MI 49503			LUGO, CARLOS	
			ART UNIT	PAPER NUMBER
			3676	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,575

Applicant(s)

MAPLE ET AL.

Examiner

Carlos Lugo

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 7, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the operation when the first actuator moves the first bolt to its locked setting so that cause the operation of the second actuator to move the second bolt to its locked setting, as claimed in claim 1; the sliding movement of the plunger, as claimed in claim 2; and the spring, as claimed in claim 4, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any

Art Unit: 3676

required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. **Claims 10 and 11 are objected** to because of the following informalities:

- Claim 10 Line 2, change “with a door” to -with the door-.
- Claim 11 Line 2, change “on a frame member” to -on the frame-.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-5 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 3,111,340 to Spencer.

Regarding claim 1, Spencer discloses a locking mechanism comprising a first actuator (70 and 71) including a first bolt (74) movable between free and locked settings. The first actuator is adapted for mounting on a frame for a hinged door (10), and arranged such that the first bolt (74) when in its locked setting, secures the door to the frame to resist opening movement.

A second actuator (30) includes a second bolt (41) movable between free and locked settings. The second actuator is adapted for mounting on the door at a location spaced from the first actuator and arranged such that the second bolt,

Art Unit: 3676

when in its locked setting, also secures the door to the frame to resist opening movement.

The mechanism further includes drive means (25) interconnecting the second actuator with the first bolt when in its locked setting, the drive means is adapted for mounting on the door and arranged such that operation of the first actuator to move the first bolt to its locked setting causes operation of the second actuator to move the second bolt to its locked setting.

As to claim 2, Spencer discloses that the drive means includes a receptor (at 89) for the first bolt, and a plunger (the one moving the bolt) mounted for sliding movement within the receptor. The receptor is adapted for mounting on a door.

As to claim 3, Spencer discloses that the second actuator (30) comprises a housing (15) adapted for mounting on the door. The second bolt (41) is slidably mounted in the housing.

As to claim 4, Spencer discloses that a spring (43) is provided to urge the second bolt towards its free setting. The second bolt (41) is moveable towards its locked setting against the action of the spring.

As to claim 5, Spencer discloses that the drive means includes a cable (25) interconnecting the plunger and the second bolt.

5. **Claim 1 is rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,813,251 to Fowler et al (Fowler).

Fowler discloses a locking mechanism comprising a first actuator (32) including a first bolt (30) movable between free and locked settings. The first actuator is

Art Unit: 3676

adapted for mounting on a frame for a hinged door (14), and arranged such that the first bolt (30) when in its locked setting, secures the door to the frame to resist opening movement.

A second actuator (34) includes a second bolt (36) movable between free and locked settings. The second actuator is adapted for mounting on the door at a location spaced from the first actuator and arranged such that the second bolt, when in its locked setting, also secures the door to the frame to resist opening movement.

The mechanism further includes drive means (44,48 and 56) interconnecting the second actuator with the first bolt when in its locked setting, the drive means is adapted for mounting on the door and arranged such that operation of the first actuator to move the first bolt to its locked setting causes operation of the second actuator to move the second bolt to its locked setting.

6. **Claims 1 and 9 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,609,215 to Self et al (Self).

Regarding claim 1, Self discloses a locking mechanism comprising a first actuator (18 and 23) including a first bolt (13) movable between free and locked settings. The first actuator is adapted for mounting on a frame for a hinged door (10), and arranged such that the first bolt (13) when in its locked setting, secures the door to the frame to resist opening movement.

A second actuator (22 and 24) includes a second bolt (12 and 14) movable between free and locked settings. The second actuator is adapted for mounting on

Art Unit: 3676

the door at a location spaced from the first actuator and arranged such that the second bolt, when in its locked setting, also secures the door to the frame to resist opening movement.

The mechanism further includes drive means (33,34,35 and 36) interconnecting the second actuator with the first bolt when in its locked setting, the drive means is adapted for mounting on the door and arranged such that operation of the first actuator to move the first bolt to its locked setting causes operation of the second actuator to move the second bolt to its locked setting.

As to claim 9, Self discloses that the first actuator is selected from the group consisting of pneumatically, hydraulically and electrically operated actuators.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 6 is rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 3,111,340 to Spencer in view of EP 100855 to Mochida.

Spencer fails to disclose that the cable includes an outer sheath covering the flexible inner shaft. Spencer discloses only a flexible inner shaft or cable.

Mochida teaches that it is well known in the art at the time the invention was made to have an outer sheath (10) covering the flexible inner shaft (11).

Art Unit: 3676

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an outer sheath, as taught by Mochida, into a device as described by Spencer, in order to cover and protect the inner shaft or cable.

9. **Claim 8 is rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 3,111,340 to Spencer in view of US Pat No 4,609,215 to Self et al (Self).

Spencer fails to disclose that the first actuator is selected from the group consisting of pneumatically, hydraulically and electrically operated actuators. Spencer discloses that the first actuator is a manual operated actuator.

Self teaches that it is well known in the art to have a manual operator and another operator selected from the group consisting of pneumatically, hydraulically and electrically operated actuators.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an actuator, as taught by Self, into a device as described by Spencer, in order to actuate the bolt.

Allowable Subject Matter

10. **Claims 7 and 10 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 11 will be allowed because the claim depends from claim 10.

Reasons For Allowable Subject Matter

11. The following is an examiner's statement of reasons for allowance:

Claims 7 and 10 presents allowable subject matter over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the combination set forth, including that the plunger is directly provided on one end of the inner shaft (claim 7) and that the first actuator is mounted on the frame and the receptor for the first bolt mounted on the door (claim 10).

As to claim 7, Spencer fails to disclose that the plunger is directly provided on one end of the inner shaft. Spencer discloses that one end of the inner shaft (25) is directly provided in the spindle (72), not in the plunger.

As to claim 10, Spencer fails to disclose that the first actuator is mounted on the frame and the receptor for the first bolt mounted on the door. Spencer discloses that the first actuator (70 and 71) and the receptor are mounted on the door, not in the frame.

Self and Fowler also disclose the same arrangement as the one described by Spencer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number is 703-305-9747. The examiner can normally be reached on 9-6pm EST.

Art Unit: 3676

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.L.

Carlos Lugo
AU 3677

September 23, 2004.

A handwritten signature in black ink that reads "Daniel P. Stodola". The signature is written in a cursive style with a large, looped initial "D".

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600